

## **REMARKS**

### Status of Claims

Claims 1, 3-5 is pending in this application.

Claim 2 has been cancelled by this amendment.

### Objections to Drawings

The Fig. 1(a) and 1(b) were objected for informalities.

The Fig. 1(a) and 1(b) have been amended and herewith attached to overcome the objections. There is no new matter introduced by this amendments.

### Objection to Specification

The Abstract of the Specification was objected for more than 150 characters.

The Abstract has been amended to be limited within 150 characters.

Various occurrences of wording informalities were objected.

Amendments have been made in the specification to overcome the wording informalities. No new matter is added by the amendments.

### Claim objections

Claims 1, 2 were objected for informalities.

Claims 1, 2 have been amended to overcome the objections.

### Claim Rejections – 35 USC §112

Claim 1 was rejected for lack of antecedent basis.

Claim 1 has been amended to overcome the rejections.

Claim 1 was rejected for unknown how the device can be immersed into an electro-polymerizing solution in step 5, when the device is not made until after polypyrrole is electro-polymerizing.

The immersed device is the yet to be polymerized device.

Claim 1 was rejected for claimed limitation “electro-polymerizing polypyrrole”

Claim 1 has been amended to clarify the cited limitation.

Claim 2 was rejected for lack of antecedent basis.

Claim 2 has been amended to overcome the rejections.

Claim 3 was rejected for lack of antecedent basis.

This rejection is overcome by the amendments made to claim 1.

Claim 3 was rejected for incorrect Markush claim expression.

Claim 3 has been amended to overcome the rejection.

Claim 4 was rejected for incorrect Markush claim expression.

Claim 4 has been amended to overcome the rejection.

Claim 5 was rejected for claimed limitation “said electro-polymerizing solution of the polypyrrole”.

Applicant clarifies herewith by stating that “the polypyrrole is the electro-polymerizing solution”.

Claim 5 was rejected for claimed limitation “said polymerizing solution of the polypyrrole comprises a buffer solution, salts, polypyrrole”.

Applicant clarifies herewith by stating that “polymerizing solution of the polypyrrole includes a buffer solution, salts, polypyrrole”

Claim 5 was rejected for being indefinite.

Claim 5 has been amended to overcome the rejection.

Claim 5 was rejected for lack of antecedent basis.

Claim 5 has been amended to overcome the rejection.

#### Claim Rejections – 35 USC §102/103

Claim 1, 3-4 were rejected under 35 USC § 102 (a) as being anticipated by Pan et al. Applicant respectfully submits that the cited prior art, Pan et al, is a commonly owned invention by the applicant. The Examiner is respectfully requested to withdraw the rejection.

#### Claim Rejections – 35 USC §103

Claims 2, 5 were rejected under USC § 103 (a) as being anticipated by Pan et al in view of Peacock et al and further in view of Gray et al.

Applicant respectfully requests Examiner to withdraw the rejection for the reasons as stated above that the primary reference is a commonly owned invention.

Claims 1, 3, 4 were rejected under USC § 103 (a) as being anticipated by JP2590004 in view of Zier et al.

The Applicant respectfully traverses the rejections with the following arguments.

[Argument 1]: The current invention, in claim 1, claimed “step 1: ..... selecting an appropriate substrate based on the solid-state sensing material and the sensing environment”. The cited prior art, JP2590004 in view of Zier et al, failed to teach the claimed limitation. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

[Argument 2]: The current invention, in claim 1, claimed “step 4: using a epoxy resin to seal the material and fixing the sensing window area”. The cited prior art, JP2590004 in

view of Zier et al, failed to teach the claimed limitation. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

[Argument 3]: The current invention, in claim 1, claimed “step 5: then immersing the device into a electro polymerizing solution, and electro-polymerizing by using polypyrrole”. The cited prior art, JP2590004 in view of Zier et al, failed to teach the claimed limitation, particularly the claimed “by using polypyrrole”.. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

[Argument 4]: The current invention, in claim 1, claimed “step A: preparing a finished conductive substrate”. The cited prior art, JP2590004 in view of Zier et al, failed to teach the claimed limitation. Examiner quoted the prior art “before immersing the substrate in the aqueous solution of glucose oxidase and pyrrole”. No where in the cited prior art teaches what the Examiner cited wording. Also, the JP2590004 in view of Zier et al did not particularly teach the claimed “preparing”. Furthermore, the “aqueous solution of glucose oxidase and pyrrole” is different from what the current invention claimed “finished conductive substrate”. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

[Argument 5]: The current invention, in claim 1, claimed “step B: cleaning the substrate”. The cited prior art, JP2590004 in view of Zier et al, failed to teach the claimed limitation. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

[Argument 6]: The current invention, in claim 1, claimed “step C: preparing said electro-polymerizing solution, which comprises a buffer solution, electrolytes, the monomer of polypyrrole”. The cited prior art, JP2590004 in view of Zier et al, failed to teach the claimed “a buffer solution” and “electrolytes”. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

[Argument 7]: The current invention, in claim 1, claimed “step D: connecting the substrate to a positive electrode of a power supply”. The cited prior art, JP2590004 in view of Zier et al, failed to teach the claimed limitation. Examiner quoted “electrolytic polymerization”. However, the quotation is totally different from is claimed by the current invention. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

[Argument 8]: The current invention, in claim 1, claimed “step D: ..... the power supply provides a constant potential which is higher than the oxidizing potential of said polypyrrole, in a manner that said polypyrrole polymerized on said substrate”. The cited prior art, JP2590004 in view of Zier et al, failed to teach the claimed limitation. The quotation made by the Examiner did not show any evidence for the rejection to the claimed limitations. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

Claims 2, 5 were rejected under USC § 103 (a) as being anticipated by JP2590004 in view of Zier et al and further in view of Koopal et al and Gray et al.

The Applicant respectfully traverses the rejections with the following arguments.

[Argument 9]: The current invention, in claim 1, claimed “said polymerizing solution of the polypyrrole comprises a buffer solution, salts, polypyrrole, the polymerizing solution comprising a phosphate solution, potassium chloride, and polypyrrole; wherein, through changing the composition of said polymerizing solution, the control of the sensitivity of said polypyrrole sensor is achieved, and wherein the process is applied to fabricate a sensing electrode with an appropriate sensitivity and the control of the sensitivity of a differential pair pH sensing device is obtained”. The cited prior art, JP2590004 in view of Koopal et al, failed to provide a motivation in teaching the motivation. Examiner is respectfully requested to provide a prima facie evidence for such a rejection.

In view of the amendments and remarks, Applicant submits that all of the pending claims are in condition for allowance and requests early and favorable action on the merits. The Examiner is invited to telephone the undersigned, Applicant's Attorney of Record, to facilitate advancement of the present application.

Respectfully submitted,

1-15-2008

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Date

/Ming Chow/

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